

Nathematics

Module 7

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Home Instructor's Guide: Days 1–9 and Assignment Booklet 7A











Grade Two Mathematics
Module 7: Numbers Big and Small
Home Instructor's Guide: Days 1–9 and Assignment Booklet 7A
Learning Technologies Branch
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This document is intended for				
Students				
Teachers	1			
Administrators				
Home Instructors	1			
General Public				
Other				



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Module 7: Numbers Big and Small

Introduction

This module focuses on counting to 1000 by 2s, 5s, and 10s; counting to 100 by 25s; and demonstrating multiplication and division by using manipulatives and by drawing.

Whenever possible, have the student count items by 2s, 5s, 10s, and 25s. Ask the student to think of ways of counting large numbers of items (grouping and counting by 2s, 5s, or 10s), such as pasta in a bag, popcorn kernels, or sunflower seeds.

To reinforce multiplication and division, provide the student with daily opportunities for sharing equally (dividing candies among two or more people, sharing packages of juice, and so on). Have the student notice how some packages contain the same number of items (toilet paper, paper towels, light bulbs, juice boxes, and so on). When you buy two or more packages of the same item, have the student say how many there are in total.

Encourage the student to work on all the Extension Activities.

Materials You Need

- manipulatives in the student's Math Box
- ten paper cups
- an egg carton
- base ten blocks
- number cards from Module 1
- materials in the Appendix (cut out and have ready to use before the lesson, in the Student Folder)
 - hundreds flats
 - place-value charts
 - paper play money

Daily Summary

Read each day's summary and familiarize yourself with the lessons before instructing the student. Some days may be a continuation of the previous day.

If there is time remaining in a math class, have the student do the Extension Activities.

Day 1

This is a review of Module 5.

Answers

- 1. a. minutes b. hours c. minutes d. hours
- 2.60
- 3. 24

4. a. less

- 5. 180 minutes
 There are 60 minutes in one hour. So, there are 180 minutes in three hours.

c. less

6. 48 hours
There are 24 hours in one day. So there are 48 hours in two days.

b. more

7. 5 12 11 1 4 10 8 9 6 7 3 2

8. December

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

a. Wednesday

d. Monday

g. 13th

i. 22nd

b. Monday

e. Wednesday

h. 4th

j. 17th

c. Tuesday

f. Sunday

9. a. 12 12 6 30

There are 12 months in one year. So, there are 24 months in two years, plus 6 months equals 30 months.

7 7 7 2 23

b. There are 7 days in one week. So, there are 21 days in three weeks, plus 2 days equals 23 days.

10. a. triangle, triangle, arrow

- b. Accept any pictures that show an AAB pattern, such as two apples and an orange.
- c. Accept any sounds that show an AAB pattern, such as clap, clap, snap.
- d. Accept any actions that show an AAB pattern, such as hop, hop, sit.

11. a. 🔷

b. diamond, one square, diamond, two squares, diamond, three squares One square is added after each diamond.

- - 0000000
 - **↑↑↑↑↑↑↑↑↑↑** .b
- 13. a. Circle the M. Here's how the pattern looks:

abCDefGHijKLmnOPqr

- b. Circle the last jump. Here's how the pattern should look: क्षित्र क्षित क्षित कार्य कार्य कार्य कार्य कर्य कर्य कर्य क्षित्र क्षित क्ष
- c. Circle the fifth group of arrows. Here's how the pattern should look:



- 14. a. 15, 20, 25, 45 b. 76, 74, 72, 70

- c. 20, 30, 70, 80 d. 15, 18, 21, 24

- 15. a. add 10
- b. subtract 8
- c. add 7
- 16. The student draws 16 marbles for week 4, 20 marbles for week 5, and 24 marbles for week 6. Mustafa will have 24 marbles in the sixth week.
- 17. a. 24, 28, 32, 36, 40
 - b. 44, 56, 76, 80
 - c. When you keep adding by 4, these are the numbers that appear.
 - d. + 3 = = = = =
 - e. Accept any of these numbers: 42, 45, 48, 51, 54, 57.
 - f. Accept any of these numbers: 52, 53, 55, 56, 58, 59, 61, 62, 64, 65, 67, 68.

Day 2

The student is introduced to hundreds. You will need the base ten blocks.

Day 2: Lesson 2

This is a review of place value (tens and ones). Have the student show the numbers on the place-value chart. The number 99 is represented on the place-value chart as nine rods in the tens column and nine cubes in the ones column; the number 38 is represented as three rods in the tens column, and eight cubes in the ones column; and so on. Review place value with the student if he or she is having difficulty. Each cube equals 1; one rod equals 10; and ten rods equal 100.

Answers

1. 73

3. 18

5. 39

2. 41

4. 86

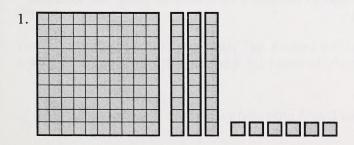
6. 54

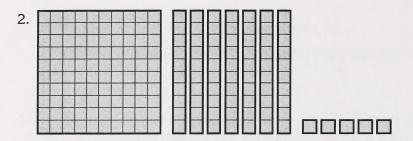
Day 2: Lesson 3

In this lesson, the student learns about the value of hundreds in the place-value chart. Place the rods and cubes next to the hundreds flat. For the number 100, show no cubes and no rods. Tell the student that means there are no ones or tens. The number reads as one hundred. That means there is one hundred, no tens, and no ones.

Count out 125 items of a manipulative for the student to group into tens. Have the student count out 12 groups of ten. Tell the student that ten ones are grouped to make one ten and ten tens are grouped to make one hundred.

Answers





Day 3

Day 3: Lesson 1

The student learns that there are three ways of showing a number.

Help the student with the three ways of showing 174 with the base ten blocks. In the first way, show 17 rods in a group and 4 cubes. In the second way, put 10 rods in a group, 7 rods in another group, then 4 cubes. In the third way, show the hundreds flat, 7 rods, and 4 cubes.

Day 3: Lesson 2

In this lesson, the focus is on showing 0 in the tens place. Place the hundreds flat and the cubes next to it on the student's desk. Take turns showing the numbers 101 to 109 with the base ten blocks. Ensure the student understands that 0 shows there are no tens. Have the student use the hundreds flats and unit cubes to show each of the numbers.

Answers

- 1. Check to make sure the student is able to represent each number using the hundreds flats, tens rods, and base ten blocks.
- 2. a. 102, 103, 104, 105, 106
 - b. 130, 131, 132, 133, 134
 - c. 147, 148, 149, 150, 151

- d. 196, 197, 198, 199, 200
- e. 168, 169, 170, 171, 172

Have the student do the assignment for Day 3 after completing the day's lessons.

Day 4

The student learns the place value of hundreds.

Day 4: Lesson 1

The student will be entering hundreds in the calculator. Check the student's answers for accuracy. Have the student make the appropriate numbers using the flats.

Answers

1. a. 300

b. 400

- c. 500d. 600
- e. 700
- g. 900
- f. 800 h. 1000
- 2. a.
 - b. _____
 - c.
 - d. _____
 - e.
 - f. ______
 - g.
 - h. ______
 - i.

Day 4: Lesson 2

You will need all 10 hundreds flats. The student will be learning to count to 1000. If you do not have ten hundreds flats, cut out the hundreds flats in the Appendix.

Answers

2. 467

Hundreds	Tens	Ones
4	6	7

3. 731

Hundreds	Tens	Ones
7	3	1

4. 388

Hundreds	Tens	Ones
3	8	8

5. 950

Hundreds	Tens	Ones
9	5	0

6. 1000

Hundreds	Tens	Ones
10	0	0

7. 707

Hundreds	Tens	Ones
7	0	7

8. 815

Hundreds	Tens	Ones
8	1	5

Day 4

Lesson 3

The student makes numbers with the flats, rods, and cubes. Check for correctness. Ensure the numbers are in the correct columns in the place-value charts.

Answers

Day 5

The student learns to count by 2s to 1000.

Day 5: Lesson 1

Think of fun things the student can do while counting out loud, such as skipping, clapping, or counting items in a collection.

Day 5: Lesson 2

This is a review of counting by 2s to 100. Review even numbers with the student. An even number can be divided into two equal parts and ends in 2, 4, 6, 8, or 0.

Answers

- 1. 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90, 92, 94, 96, 98, 100
- 2. 100

Day 5: Lesson 3

The student learns that numbers remain even when counting by 2s after 100. Have the student skip count by twos on the calculator.

Answers

- 1. 104, 106, 108, 110, 112, 114, 116, 118, 120, 122, 124, 126, 128, 130, 132, 134, 136, 138, 140
- 2. a. yes b. no c. no d. yes e. no f. yes g. no h. yes
- 3. a. 356, 358, 360, 362, 364 d. 950, 952, 954, 956, 958 b. 284, 286, 288, 290, 292 e. 432, 434, 436, 438, 440
 - c. 798, 800, 802, 804, 806 f. 566, 568, 570, 572, 574

4.	648	650	652	654	656	658	660	662
	664	666	668	670	672	674	676	678
	680	682	684	686	688	690	692	694
	696	698	700	702	704	706	708	710
	712	714	716	718	720	722	724	726
	728	730	732	734	736	738	740	742

Have the student do the assignment for Day 5 after completing the day's lessons.

Day 6

The student learns to count by 5s to 1000.

Day 6: Lesson 2

The student skip counts by 5s to 100 using nickels. Guide the student through counting by 5s to 1000.

Answers

1. 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100

- 2. 110, 115, 120, 125, 130, 135, 140, 145, 150, 155, 160, 165, 170, 175, 180, 185, 190, 195, 200
- 3. 205, 210, 215, 220, 225, 230, 235, 240, 245, 250, 255, 260, 265, 270, 275, 280, 285, 290, 295, 300
- 4. 705, 710, 715, 720, 725, 730, 735, 740, 745, 750, 755, 760, 765, 770, 775, 780, 785, 790, 795, 800
- 5. 905, 910, 915, 920, 925, 930, 935, 940, 945, 950, 955, 960, 965, 970, 975, 980, 985, 990, 995, 1000

Day 6: Lesson 3

Have the student skip count by fives on the calculator.

c. no

Answers

2. a. no

4

- 1. a. 320, 325, 330, 335
- c. 985, 990, 995, 1000
- ь. 745, 750, 755, 760
- d. 570, 575, 580, 585

e. no

- b. yes
- d. 950, 955, 960, 965, 970
- 3. a. 360, 365, 370, 375, 380 b. 285, 290, 295, 300, 305
- e. 435, 440, 445, 450, 455

f. yes

- c. 800, 805, 810, 815, 820
- f. 565, 570, 575, 580, 585

1.		COLUMN TO THE PROPERTY OF THE	PO-2007-97-1-4-00-4-1-4-0-4-1-4-4-4-4-4-4-4-4-4-4-					
•	650	655	660	665	670	675	680	685
	690	695	700	705	710	715	720	725
	730	735	740	745	750	755	760	765
	770	775	780	785	790	795	800	805
	810	815	820	825	830	835	840	845
	850	855	860	865	870	875	880	885

d. no

Have the student do the assignment for Day 6 after completing the day's lessons.

g. yes h. no

Day 7

The student learns to count by 10s to 1000.

Day 7: Lesson 2

Have the student count by tens with the dimes. Guide the student through counting by 10s to 1000.

Answers

- 1. 20, 30, 40, 50, 60, 70, 80, 90, 100
- 2. 110, 120, 130, 140, 150, 160, 170, 180, 190, 200
- 3. 210, 220, 230, 240, 250, 260, 270, 280, 290, 300
- 4. 510, 520, 530, 540, 550, 560, 570, 580, 590, 600
- 5. 910, 920, 930, 940, 950, 960, 970, 980, 990, 1000

Day 7: Lesson 3

In this lesson, the student will see how 10 tens make up 100 in a linking train, and how 10 rods form a square. The square represents the number 100, and forming the ten rods into a square will reinforce this concept.

- 1. a. 620, 630, 640, 650
- c. 970, 980, 990, 1000
- ь. 890, 900, 910, 920
- d. 550, 560, 570, 580
- 2. a. no b. yes c. yes d. no e. yes f. no g. yes h. no
- 3. a. 350, 360, 370, 380, 390
- d. 940, 950, 960, 970, 980
- b. 280, 290, 300, 310, 320
- e. 420, 430, 440, 450, 460
- c. 800, 810, 820, 830, 840
- f. 560, 570, 580, 590, 600

4.

10	20	30	40	50	60	70	80	90	100
110	120	130	140	150	160	170	180	190	200
210	220	230	240	250	260	270	280	290	300
310	320	330	340	350	360	370	380	390	400
410	420	430	440	450	460	470	480	490	500
510	520	530	540	550	560	570	580	590	600
610	620	630	640	650	660	670	680	690	700
710	720	730	740	750	760	770	780	790	800
810	820	830	840	850	860	870	880	890	900
910	920	930	940	950	960	970	980	990	1000

Have the student do the assignment for Day 7 after completing the day's lessons.

Day 8

The student learns to count by 25s to 100.

Day 8: Lesson 2

Guide the student through the procedure of finding the worth of one, two, three, and four quarters.

Have the student do the assignment for Day 8 after completing the day's lessons.

Day 8: Lesson 3

Answers

- 1. a. 50, 75, 100 b. 100

- c. 75, 100 d. 50, 75, 100

2. a. 50

- b. 100
- c. 25

d. 75

There are extension activities for Days 4 to 8.

Day 9

This is an introduction to the concept of multiplication.

Day 9: Lesson 1

The student learns about finding the total number of items in equal groups of two. The groups are equal because each group has the same number of items in it. For example, to solve the number of ears on ten elephants, there are ten groups of 2s. (Each elephant has two ears.)

Day 9: Lesson 2

Help the student come up with a story problem of his or her own to solve using one of the groups of two he or she listed. For example, a chicken coop has eight chickens. Each chicken has two legs. How many legs are in the coop? Have the student draw the eight chickens. Then have the student use counters as well by making eight groups of two in each.

When the student finishes the activities on Day 9, direct him or her to the Student Survey and Student Checklist in Assignment Booklet 7A. The student may work on these alone or with your help. Go over the responses and discuss them with the student. Give additional instruction as needed to any of the concepts the student has indicated he or she needs help with.

Ensure that you complete the Home Instructor's Evaluation Checklist and the Home Instructor's Feedback forms for Days 1 to 9. The Home Instructor's Feedback is to give any information you think may be helpful for the teacher to know.

Submit Assignment Booklet 7A for marking.

ASSIGNMENT BOOKLET 7A

Grade Two Mathematics Module 7: Days 1–9

Home Instructor's Comments	and (Questions		FOR SCHOOL USE ONLY
				Assigned Teacher:
		Home Instructor's Signatu	ıre	Grading
FOR HOME INSTRUCTOR USE (if label is missing or incorrect) Student File Number:	abel Here		inted label is for id module.	Mathematics: Neatness:
Grading Scale A – Very Satisfactory B – Satisfactory C – Needs Attention D – Unsatisfactory	Apply Module Label Here	Name Address Postal Code	Please verify that preprinted label is for correct course and module.	Date Assignment Booklet Received:
Teacher's Comments		Ž Š Š	<u>) </u>	
				Teacher's Signature

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- Has your work been reread to be sure the spelling and details are correct?
- Is the record form filled out and the correct module label attached?

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Numbers Big and Small

Assignment Booklet 7A







Grade Two Mathematics Module 7: Numbers Big and Small Assignment Booklet 7A Learning Technologies Branch

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Students	1
Teachers	1
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Other	



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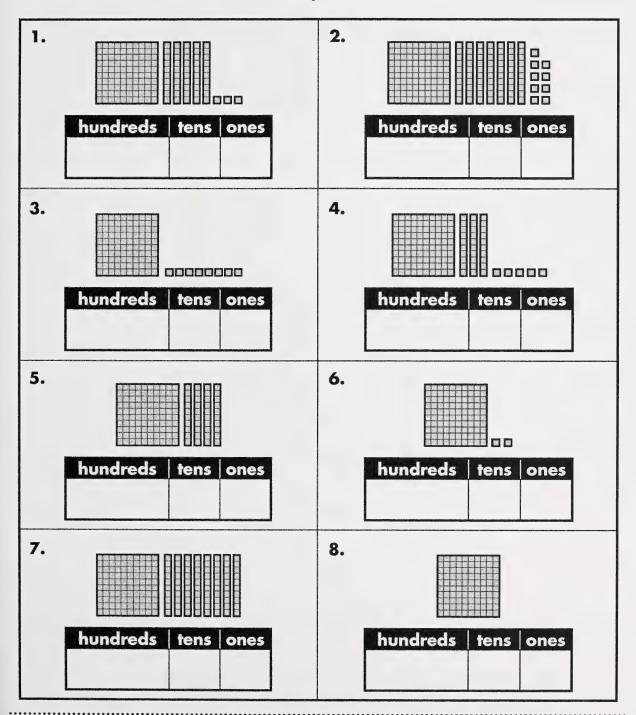
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Print the number for each of these in the place-value charts.



Count by ones. Print the numbers that follow on the lines.

15. 113, ______, _____, ______, ________

Count by twos. Print the numbers that follow on the lines.

7. Count by twos to fill in the blanks in the chart.

256				
	272			282
298				310
		318		

Count by fives. Print the numbers that follow on the lines.

2. 635, ______, _____, ______, _______

3. 700, ______, _____, ______, _______

7. Count by fives to fill in the blanks in the chart.

295					
340					
385			405		
			450		
				510	
	575				
	620				
			675		
		715			

Count by tens. Print the numbers that follow on the lines.

1. 760, ______, _____, ______, _______

6. 820, ______, _____, ______, _______

8. Count by tens to fill in the blanks in the chart.

200					260	
			310			·
						430
				490		
		540				
	610					

Count by 25s. Fill in the numbers in the blank spaces.

- 1. _____,75, _____
- 2. 50, ______, _____

- 5. 25, _____, 75

Count the quarters and print the value of each.

6.



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Student Checklist

Days 1 to 9

I know how to	Put a check mark beside the things you can do.
1. count to 1000 by 1s, 2s, 5s, 10s, and to 100 by 25s	
show equal groups with my manipulatives and in my pictures	

Home Instructor's Evaluation Checklist

Days 1 to 9

Specific Outcomes/ Concepts Learned The student	Has the student mastered the concept (yes or no)?
1. counts to 1000 by 1s, 2s, 5s, and 10s and to 100 by 25s using starting points that are multiples of 1, 2, 5, 10, and 25 respectively	
demonstrates the processes of multiplication using manipulatives and diagrams	

Student Survey

Days	1	to	9
------	---	----	---

Think about what you have learned in Days 1 to 9. Then answer these questions.
What did you find easy about Days 1 to 9?
The state of the s
List three things you learned about numbers in Days 1 to 9.

Is there something you would like to know more about?
Is there something you still need help with?

(3)

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